

VIII. Information Technology Strategic Initiatives

ALIGNMENT

The Information Technology Strategic Initiatives are aligned with initiatives in *Justice for the Future: Planning for Excellence 2019-2024*. This section provides information on each Information Technology Strategic Initiative and its alignment with business needs of the Judiciary.

THE CURRENT IT STRATEGIC INITIATIVES ARE:

1. Promote a Systemic Thinking Approach to Problem Solving with Technology
2. Provide Infrastructure that Facilitates Effective Communication and Integration
3. Enhance Information Security and Disaster Recovery to Protect Statewide Court Technology-Related Assets and the Reputation of the Judiciary
4. Standardize Processes and Solutions to Improve Efficiency and Effectiveness
5. Complete and Enhance Second-Generation Statewide Automation Projects
6. Improve Data Exchange, Communications, and Public Access
7. Digitize the Court Environment
8. Provide Divisions of the Administrative Office of the Courts Solutions for Internal Administrative Support

Through first-generation automation efforts, the Arizona Judicial Branch has become dependent upon technology to facilitate its record keeping and communications activities. Information technology initiatives enable the Judiciary to better use dependable technologies and related processes to enhance and support their business needs.

An initiative to "Promote a Systemic Thinking Approach to Technological Solutions" was first introduced in the FY 2002-2004 plan and has only grown more important over time. Many initiatives continue to focus on long-term changes of business practices to improve public safety and service. The approach has always been supported, but as increasingly interdependent projects are undertaken, it seems prudent to highlight this very important perspective. Its intent is to encourage both the business leaders and technologists to more thoroughly examine the impacts of their automation undertakings and to consider business process reengineering a key element in the process. When undertaking a project, technologists and their business leaders need to balance the immediate need with the long-term impacts, recognizing the increasing interconnectedness of courts and justice partners.

The Judiciary depends on electronic communications via email, instant messaging, videoconferencing, the Internet, SharePoint, and the Intranet (which resides on the Arizona Judicial Information Network) to communicate with other court employees, the public, and with other justice agencies. Therefore, enhancing and securing the infrastructure is critical to implementation of judicial strategic business projects. Information technology strategic goals encompass an approach of building a foundation through infrastructure, security, and statewide applications; integrating with justice partners; and constructing an information supply chain that ends with appropriate public access during the retention period.

Establishing basic case and cash management systems, having common data definitions, standard codes, and consistent data recording practices in courts across the state supports the need of the Judiciary to gather, track, and analyze information. The information technology project to create a central data repository to provide for data analysis, for instance, is predicated on all courts' case and cash management data being in electronic form.

A more accessible court system is another focus of the Judiciary’s strategic initiatives. Technology initiatives and their related projects support accessibility goals with the expansion of electronic filing and electronic forms via the Internet. A focus on security, business continuity, and disaster recovery necessarily accompanies the courts’ transition to an all-digital environment as well. Population of a central repository to store copies of court documents geographically separate from the courts themselves and provide appropriate access is also foundational to the various “e” projects being undertaken.

An integrated justice system is also a priority. Given that there is a single court organization in the state versus multiple other agencies involved in law enforcement, the Branch is in a unique position to bring together the other functions to improve the manner in which justice is administered in the State of Arizona. Technology projects to participate in data exchanges, manage digital evidence, and share information with local and state agencies support this. And, of course, having a reliable and secure network is critical to such electronic sharing.

For ease of reference, the IT strategic initiatives aligned to meet the Judiciary’s business needs have been numbered as follows:

1. Systemic thinking/approach
2. Provide a robust infrastructure
3. Enhance security and disaster recovery
4. Standardize processes and solutions
5. Complete 2nd generation automation
6. Improve data exchange and communications
7. Digitize the court environment
8. Provide administrative support

INFORMATION TECHNOLOGY STRATEGIC INITIATIVES SUMMARY

The following sections detail each of the eight information technology strategic initiatives.

The **Background** section includes a description of the initiative, its background, and the elements of the technology environment included in the initiative.

The **Strategic Alignment** section aligns the initiatives with the Commission on Technology’s strategic automation goals.

In the **Business Value** section, the benefits that will accrue to the Judiciary and to the general public are identified. They include such things as improved quality of case and cash management, enhancing access to the courts, and reducing or avoiding costs.

In the **Dependencies** section, other activities, projects, and groups upon which achieving this initiative depend are listed. This section will highlight the relationship of the strategic projects to one another.

Finally, in the **Impacts** section, each strategic project associated with the initiative is identified.



Promote a Systemic Thinking Approach to Problem Solving with Technology

BACKGROUND

The Judicial Branch is directing its efforts to “front-office” solutions, offering improved public access, internal and external integration, and better customer service. As we address such systems as jury management, online courtrooms, bench automation, e-filing, and justice integration, we must take a systemic approach. We are in danger of either not meeting the demand or building unique solutions for every problem or commitment, increasing both cost and complexity. We can respond with a piecemeal, reactive approach or we can:

- Understand and Automate the Supply Chain
- Understand and Automate Judicial Business Processes

The supply chain is made up of all our business partners, including law enforcement and prosecuting attorneys. If the judiciary doesn’t respond in an organized fashion, it could use ineffective or incompatible tools and approaches to address interdependence, integration, and other process challenges. For instance, supporting multiple processes, protocols, and systems in our integration with federated courts and other agencies, especially criminal justice agencies, will increase both complexity and cost. The solution is to:

- Acknowledge process interdependence as the guiding principle for judicial planning.
- Study, document, and then automate the judicial system supply chain in a uniform manner.
- Build an infrastructure for integration of information among courts and between courts and other agencies.
- Identify a “best practices” approach to judicial business processes, then document and automate them.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 1: SYSTEMIC THINKING/APPROACH ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS	
• Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure.	X
• Improve information access and communication from and to the judicial functions.	X
• Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.	X

BUSINESS VALUE

- Improved responsiveness and productivity of court staff.
- Reduced risks in and complexity of systems development by reducing the number of process, systems, and protocols/standards requiring support.
- Improved overall quality of processes by using a “best practices” approach.
- Improved rural court productivity by providing them with the same level of processes supported by technology afforded to large, metropolitan courts.
- Reduced costs of resources by centralizing and eliminating, where feasible, duplicate procedures, forms, processes, and structures.
- Reduced training and support resources by standardizing the processes and procedures as well as the applications software, systems software, and hardware deployed to support them.

DEPENDENCIES

All strategic projects are dependent on this initiative. The systemic thinking approach should and will be applied to projects. An analysis and documentation of the supply chain, as well as the underlying business process, will assure that a technology implementation is supporting a “best practices” solution.

IMPACTS

The impact is widespread. Each IT project should implement a solution that is not skeuomorphic or just “paving a cow path.” As interdependency increases, projects must also consider impacts on other systems and on business processes. This includes secondary impacts outside the immediate sphere of the project, potentially including other agencies. The judiciary must now examine the entire context, since technology has changed the environment and enabled so many interdependencies. Solutions must be designed with the understanding that there may be entirely new and better ways of doing business using the new tools.

This initiative has an impact on all IT projects.



Provide Infrastructure that Facilitates Effective Communication and Integration

BACKGROUND

The Judiciary has been deploying and supporting automation statewide since 1990. A sophisticated and extensive infrastructure is required to support this effort. Most important to communication and coordination is a network connecting courts to one another and to the Supreme Court. There are two divisions of the Court of Appeals, 15 Superior Court locations, 80 Justice of the Peace Courts, and 82 Municipal Courts. There are over 420 judges and more than 9,200 employees of the Judiciary statewide.

The Arizona Judicial Information Network (AJIN) is a dedicated DS-1 MPLS, Ethernet, and wireless network extending to all courts as well as standalone probation and detention sites statewide. As the demand increases for functionality such as electronic document management systems, interactive Web-based training, videoconferencing, disaster recovery hot sites, and information sharing among courts and agencies, the network must correspondingly increase throughput and flexibility. The Judiciary has responsibility for the expansion, enhancement, and maintenance of the network to meet bandwidth requirements, and for working with communications providers to assure uninterrupted system availability.

A centralized customer service center staffed by specialists in desktop software, court applications software, and desktop hardware fields all help calls from sites. It uses problem and change tracking software as well as call tracking software. The scope of operations has been expanded over time from support of the AZTEC statewide case management and financials application only to include all statewide automation products. This effort is critical to maintaining on-going operations in each Arizona court and probation department site.

First-level support assists court personnel statewide in resolving problems. Second-level technical support personnel install and upgrade systems and respond to critical systems problems. They also proactively maintain equipment for almost 3800 users statewide. While it is most desirable to have onsite or regional technical personnel to provide the most immediate and timely support, deployment of dedicated AOC field support personnel remains cost prohibitive. Deployment of a distributed systems management system was undertaken in FY 2004 to reduce field support travel requirements. The Microsoft System Center software used today not only enables a technician located in Phoenix to remotely assist users throughout the state, but also deploys software upgrades and security updates on PCs and laptops to ensure they remain within support and security patch requirements.

In FY 2001, the centralized support center and second-level support functions were combined to form ITD Central Support Services. Second-level support personnel were cross-trained in the statewide applications in order to address more than one application during a site visit. This move improved assistance response time, reduced field support costs, and brought about a more systemic perspective among support personnel.

To support training needs statewide, a local automation trainer/business analyst continues to be funded. State funding matches local contributions to create this position which provides training on centralized automation systems and “best practice” court processes. The position addresses training of new employees, introduction of new processes, new court software release training support, and generally works with centralized state trainers to support uniformity and quality in court processing statewide. This program has been very successful in past years and will receive continued funding through FY 2022.

Historically, not all rural counties have been able to take advantage of the trainer positions, due to local funding constraints. Several years ago, AOC Court Services Division obtained permission from COT to reallocate some funding to address the needs of counties that have never been able to afford the field trainer for which state matching funds had been reserved. This resulted in increased coverage by field trainers to underserved counties.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 2: INFRASTRUCTURE ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS	
<ul style="list-style-type: none"> Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure. 	X
<ul style="list-style-type: none"> Improve information access and communication from and to the judicial functions. 	X
<ul style="list-style-type: none"> Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads. 	

BUSINESS VALUE

This strategic initiative will create, extend, and support an infrastructure that provides business value to statewide activities, involving the network, centralized help desk support, field support, equipment, and distributed system management. The benefits or business values for each area will allow:

NETWORK

- Improved rural court productivity by providing the same level of technology afforded the large metropolitan courts.
- Improved customer service by providing higher quality of data and case management and greater public access to information.
- Improved, more secure access to the Internet for rural courts with improved throughput.
- Improved centralized access to information, such as criminal history, orders of protection, domestic violence, etc., for law enforcement.
- Improved electronic integration with the legal community and other justice-related departments and agencies.
- Improved responsiveness and productivity of court staff.
- Reduced risks in and complexity of systems development by reducing the number of systems and protocols/standards needing support.
- Reduced reliance on local vendors.
- Improved openness and interoperability of judicial systems with outside agencies.

CENTRALIZED HELP DESK

- Improved overall quality of systems by devoting limited resources to fewer of them.
- Improved rural court productivity by providing them with the same level of technology afforded the large metropolitan courts.

- Reduced costs of resources by centralizing and eliminating, where feasible, duplicate support structures.
- Reduced total training and support resources required by standardizing the applications software, systems software, and hardware deployed.

FIELD SUPPORT

- Improved responsiveness and productivity of court staff.
- Improved rural court productivity by providing the same level of technology as in the large metropolitan courts.
- Reduced training and support resources required by standardizing the applications software, systems software, and hardware deployed.
- Increased efficiency, accuracy, and effectiveness of support by developing and documenting processes and procedures.
- Reduced costs of resources by centralizing and eliminating duplicate support structures.
- Improved breadth of knowledge and quality of support staff.

IT EQUIPMENT UPGRADES

- Improved rural court productivity by providing the same level of technology afforded to large metropolitan courts.
- Reduced risks in and complexity of systems development by reducing the diversity of systems and protocols/standards requiring support.
- Reduced cost of maintenance by routine enhancements, upgrades, and replacements as well as preventative maintenance.
- Improved power consumption/energy efficiency and reduced carbon footprint.

DISTRIBUTED SYSTEM MANAGEMENT

- Increased effectiveness of support by automating tracking, distribution, and other routine tasks.
- Increased system availability.
- Improved responsiveness and quality of support staff customer service.
- Reduced travel-related costs for support.

DEPENDENCIES

- Continued availability and enhancement of high-speed communications statewide (as courts continue to consume more bandwidth).
- Continued funding availability for field training positions.
- Effective use of remote PC management software in the Windows 10/Office 365 “perpetual update” environment and with any new applications.
- Continued funding for refresh of PC hardware, operating systems, and software in the field to ensure items remain in support by the vendors and free of known security vulnerabilities.

IMPACTS

The infrastructure, along with the applications deployed on state-supported hardware and software throughout Arizona, provides the processing and communications foundation on which the remaining initiatives are built. Such initiatives and projects as justice agency integration, public access, electronic filing, and time standards reporting rely on a robust and well-supported infrastructure.

Nearly all the IT projects are impacted by and aligned with this initiative.



Enhance Security & Disaster Recovery to Protect Court Technology-Related Assets

BACKGROUND

The digital world is becoming ever more perilous as business process become fully digitized and computer systems become increasingly interconnected. With the creation of AJIN, the deployment of the centralized Juvenile On-Line Tracking System, and the development of the AZTEC case management system using client-server architecture, the Judicial Branch accepted the major responsibility of safeguarding the data and infrastructure on which courts statewide rely. An information security specialist developed the specific strategies, standards, and policies to achieve this goal and periodic audits ensure their continued effectiveness.

Taking a purely central approach to addressing data security has become insufficient as a more decentralized and federated environment has been constructed over time. For example, electronic document management and criminal justice data integration projects present increased requirements for data security at the local level as statewide processes grow dependent on feeds from courts. Unfortunately, local courts typically have neither the money nor the equipment to ensure continuation of their business in a disaster. What used to be their isolated risk has graduated to a system-wide risk, as courts become more process dependent on electronic documents and more data gets captured at the source. The Administrative Office of the Courts is working with the Department of Public Safety to address security issues related to criminal justice data. Several committees, most recently the Court's Electronic Record Retention and Destruction Advisory Committee, have been addressing a variety of electronic recordkeeping issues. The Clerks of Court, as the constitutionally designated keepers of the record, are also involved in various workgroups to develop appropriate standards and consistent processes to provide for secure and reliable electronic data and documents.

COT continues to recognize an increasingly long list of vulnerabilities for courts. Two standing subcommittees of the Commission, CACC and TAC, have been charged with crafting best practices, related procedures, and training sessions to improve the survivability of data at the local courthouse. A business continuity matrix was approved for distribution with the FY 2008 IT planning materials and subsequently became the tool for recording efforts by the general jurisdiction case management system team to quantify local risks and dependencies on statewide systems as part of their pre-implementation efforts. Results of the data gathering effort quantified the business risks courts face but no decision was reached about paying the costs to address those risks. A data recovery approach carried the most palatable price tag but did not enable a sufficiently speedy recovery while full replication met recovery expectations but carried unpalatable one-time and ongoing price tags. Work on the AOC's restoration times under various disaster scenarios for statewide resources they rely on to conduct business bogged down at the point of prioritizing restoration events among all court programs. The recent prominence of ransomware/data extortion attacks against government entities has re-invigorated discussions. This effort will be part of a re-examination of local continuity of operations plans during the planning period.

Malicious web content, viruses, and phishing have given way to much more sophisticated attacks that bypass traditional perimeter defenses. Theft of credentials, account hijacking, ransomware with data extortion, and business e-mail compromise are only a few recent threats. Various high priority projects and tasks must be accomplished over the coming years to assure the courts' network and assets remain protected. An example is applying port security on routers to enable more rapid discovery of unauthorized devices and containment of malicious content entering the network from remote points. As more employees' personal devices made their way onto AJIN during the COVID-19 pandemic, the network now requires even more vigilant protection from potential back doors. In 2015, an annual cybersecurity training requirement was added for every judicial employee in the state. Various video and live training sessions have since been developed by ITD to assist employees in meeting the ongoing requirement. In 2016, the Arizona Judicial Council approved minimum security

standards for all courts and COT inaugurated a security subcommittee, chaired by the vice chief justice, to oversee the comprehensive, standards-based, statewide security approach and to evaluate implementation gaps returned by individual courts as well as periodic network vulnerability scan results.

Section O of A.R.S. § 18-552, “Notification of Security System Breaches,” revised in 2018, mandates that courts create and maintain an information security policy that includes notification procedures for a breach of the security system of the court. “Breach” means an unauthorized acquisition of and access to unencrypted or unredacted computerized data that materially compromises the security or confidentiality of personal information likely to cause substantial economic loss to an individual. The scope of personal identification was overhauled to include nine specific items:

- 1. An individual's social security number.
- 2. The number on an individual's driver license or nonoperating identification license.
- 3. A private key that is unique to an individual and that is used to authenticate or sign an electronic record.
- 4. An individual's financial account number or credit or debit card number in combination with any required security code, access code or password that would allow access to the individual's financial account.
- 5. An individual's health insurance identification number.
- 6. Information about an individual's medical or mental health treatment or diagnosis by a health care professional.
- 7. An individual's passport number.
- 8. An individual's taxpayer identification number or an identity protection personal identification number issued by the United States Internal Revenue Service.
- 9. Unique biometric data generated from a measurement or analysis of human body characteristics to authenticate an individual when the individual accesses an online account.

Administrative Order (AO) 2018-72 instructing courts on the minimum content of a local policy that complies with the legislation includes the additional provisions of the revised statute. Mandatory security awareness training has included aspects of the AO and informed employees that Microsoft’s OneDrive for Business supplied to ACAP courts encrypts all stored data, exempting it from the breach notification requirement should OneDrive be hacked. Unfortunately, credential thievery and replay attacks defeat Office 365 encryption, so awareness training continues to add detail about bait in phishing attacks and practical techniques to avoid being victimized. Efforts to greatly reduce the likelihood of account takeovers by requiring a second authentication factor (2FA) for all court employees and vendors who access cloud resources or log in from outside the workplace are nearing completion.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 3: ENHANCE SECURITY AND DISASTER RECOVERY ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS	
• Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure.	X
• Improve information access and communication from and to the judicial functions.	X
• Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.	X

BUSINESS VALUE

Better protect courts’ technology-related assets to reduce the risk of losing court assets or breaching data privacy requirements. Minimize disruption of business or loss of electronic records in the event of a local court disaster. Protect the reputation of the judiciary in the eyes of the public as a trustworthy branch of government.

DEPENDENCIES

SECURITY

- Continued security/disaster recovery of centralized systems and data.
- Cooperative solutions with local governments when developing standards for local data and business continuity actions.
- Layers of security on e-filing and eAccess systems to appropriately protect information and the court record.

PRIVACY

- Rule 123 and legislation-compliant solutions for use with EDMS, CMS, and public access projects.
- Trustworthy redaction techniques for electronic information.

IMPACTS

The recent experience of other state court systems indicates that if not successful, long-term disruption of court business operations will occur, as well as loss of valuable court data and documents. Personal and confidential data, protected by Rule 123, might be made available for public view as a result of missing or insufficient controls.

A data breach would prompt initiation of a costly investigation and potentially a trust-eroding public notification process if the data had not been encrypted.

Projects affected include:

- Business Continuity
- eFiling
- CMS Core Support (AJACS)
- Electronic Document Management
- Public Access to Case Information and Documents
- Statewide eWarrants
- Statewide Protective Orders



Standardize Processes and Solutions to Improve Efficiency and Effectiveness

BACKGROUND

As courts reside in the realm of e-government and e-records, the importance of having enterprise architecture (EA) and related technology standards cannot be emphasized enough. Around 80 percent of new technology companies go out of business within 5 years of their formation. IT trade publications continue to hype expensive new approaches to age-old business problems every day. The pace of change increases at an exponential rate. New technologies are always accompanied by risks. Courts that make the wrong decisions about technology often find themselves relying on unsupported applications for their day-to-day work, sometimes for many years, a risky and expensive place to be.

A need exists for a set of cohesive standards to build to that promotes both reuse and sharing of automation systems across many jurisdictions. EA functions as a type of building code across the entire organization, describing a direction for current and future technology activities, supported by underlying product and integration standards that mitigate risk for courts. It acknowledges the interdependence of courts within the supply chain of data as well as the distributed nature of the court system and helps them maximize local investments by selecting products that interoperate, promoting data sharing and citizen access through e-government. EA focuses on the holistic impact to the organization.

EA effectively supports and enhances the business of government and improves the ability to deliver responsive, cost-effective government functions and services. Effective utilization of technology to achieve business functions and services, increasing citizen access to those services, sharing information and resources at all levels of government, and maximizing investment in IT resources are major motivating factors for the development and implementation of EA. Using technologies and products adhering to the “building code” enhances government services as a whole, promotes e-government solutions, improves productivity and performance, and optimizes economies of scale through interoperability, portability, scalability, and the sharing of resources. Standard solutions also eliminate the need to make redundant contracts and purchases. They reduce implementation and support costs by limiting the range of solutions to a manageable few.

All technologies traverse a practical and functional life cycle from emerging to mainstream then, over time, to unsupported and eventually to obsolete. To provide direction regarding the life cycle categories for common court technologies, the Technical Advisory Council maintains a detailed table of EA standards for the branch. The Judicial Project Investment Justification (JPIJ) requires an explanation of the adherence of any new project to the standards. The annual IT plan project detail input sheet requires the same. The table includes a designation of the lifecycle category associated with listed products and technologies: Watchlist, Mainstream, Containment, or Retirement.

COT has designated that all items labeled “retirement” have a replacement strategy identified in the current IT plan for the courts where they are installed. For reference, the approved table resides at <http://www.azcourts.gov/cot/Enterprise-Architecture-Standards>. Any court can request that TAC consider a new standard for addition to the table at any time. There is also an exception process a court may use to request a business-related, one-time waiver to a particular standard.

In addition to general standards contained in the EA standards table, like GJXDM, more specific, pragmatic direction is needed in relation to various projects. A subset of a standard is sometimes necessary to provide direction to court developers. An example is specific XML tags used to communicate specific types of information or transactions, for electronic citations. In those instances, COT has directed TAC to establish and maintain detailed specifications for various functions or levels

of court within the framework of the approved standards. Issues related to specifications may be brought to COT for resolution, if necessary.

Specifications developed so far relate to reporting defensive driving school information, e-filing civil cases, court-to-court record on appeal, and e-citation. Originally based on the Maricopa multi-vendor model, the civil case e-filing specification defines a common tagging scheme that complies with ECF 4.X, an industry standard for e-filing. The record on appeal specification defines tags necessary to electronically transfer a record on appeal, including the index of record, from a trial court to an appellate court, and from one appellate court to the next appellate court. Criminal case standards are also being set in conjunction with ACJC and criminal justice partners.

Recognizing the complex and fast changing technology environment on which courts now depend, COT ratified a set of IT operational standards, developed by technology leaders from across the courts statewide to be provided to court business leaders as a reference point for evaluating the effectiveness and reliability of local technology functions. Rather than specifying specifics about technology, the standards focus on responsibility for supporting whatever current technologies are being relied upon by the court. To that end, these standards specify the level of capability the technology support provider must have, be they in-house staff, city or county IT, an externally contracted vendor, or the AOC. Managing to these standards provides court leaders with greater visibility of outstanding technology risks and provides confidence that technology is being applied and managed effectively. Adherence to the same set of standards by the AOC and the self-supported courts will reduce the business risk for the entire judicial branch.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 4: STANDARDIZE PROCESS AND SOLUTIONS ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS	
• Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure.	X
• Improve information access and communication from and to the judicial functions.	X
• Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.	X

BUSINESS VALUE

ENTERPRISE ARCHITECTURE

- Reduced risks in and complexity of systems development by reducing the number of systems and protocols/standards requiring support.
- Reduced training and support resources required by standardizing the applications software, systems software, and hardware deployed.
- Improved rural court productivity by providing them with the same level of technology afforded the large metropolitan courts.
- Improved responsiveness and productivity of court staff.

STANDARDS

- Mitigated project risks, increased project success, and increased interoperability and sharing of information and resources.
- Improved responsiveness and productivity of court staff.

- Improved rural court productivity by providing them with the same level of technology afforded the large metropolitan courts.
- Improved quality of support staff customer service.

DETAILED SPECIFICATIONS

- Improved specific direction on application of standards to developers.
- Enablement of interoperability of component-based systems, whether developed in courts or by vendors.

DEPENDENCIES

- Continued definition, maintenance, and communication of EA standards as technology products and solutions traverse their lifecycle.
- Most priority projects are either dependent upon or will significantly benefit from the application of standards and related, detailed specifications.
- Every exception approved puts a chink in the armor of a cohesive, statewide, integrated system thereby increasing overall cost and integration complexity.

IMPACTS

Every project needs to be closely aligned to this strategic initiative. Courts having items listed in the “Retirement” column of the EA Standards Table must identify a replacement strategy in their next IT plan submittal or risk withholding of approval for the plan. Several counties have had approval withheld in past COT review cycles, effectively increasing the priority of keeping local technology current and vendor supported.



Complete and Enhance Second-Generation Statewide Automation Projects

BACKGROUND

The courts embarked on the first wave of statewide automation around 1990 with a goal of implementing a standard case and financial management system to replace manual processes. A juvenile probation system was expanded from Maricopa County to statewide use by the mid-1990s. The AZTEC case management system was deployed to 147 courts by the end of the decade. The hallmark of first-wave automation systems was their standalone approach, targeting specific high-volume, back-office areas and incidentally replicating functions of other automation products, e.g., JOLTS and AZTEC both did calendaring, case management, and financials, only for two different populations. They were constructed for a specific level of court absent any overarching direction from branch technology or integration standards and so took on a closed, proprietary flavor, necessitating a back-end data warehouse to accomplish any integration. Sadly, these systems typically only increased the workload of the court, in the end, as personnel entered data into multiple systems in addition to wielding the paper. The systems did not align well with court business practices, being encyclopedic rather than workflow process based.

The second wave of automation is component based and focused on re-use of building blocks that can be modified and flexed across various systems. Doing so requires clear standards in both technology and business processes as well as intensive coordination among system developers and business testers/users. The systems are designed from the standpoint of innovation more than generation; most data courts work with comes from somewhere else. The court acts as a hub of information more than an originator. Second-generation systems pick up information from law enforcement and attorneys' systems, reducing workload by moving the responsibility for input to the source to get the clerk out of the data entry business. New systems contain workflow right out of the box, providing an inherent standard business process, removing the need for understanding the entire process before being able to perform any part of it. They also are exception based, triggering alerts whenever items fall outside specified parameters.

The Judiciary has two second-generation statewide automation projects underway and completing them remains a top priority. They provide for appellate case and cash management as well as probationer management for the various levels and/or departments within the Judiciary, using shared core services that leverage development efforts following standards.

Meanwhile, support and enhancement of existing statewide applications remain a priority, though balanced against the remaining life of the application being enhanced. The Arizona Court Automation Project (ACAP) continues to provide automation to justice and municipal courts. During FY 2000, the Windows version of the AZTEC case management software was implemented in most rural and suburban courts. During FY 2002, a replacement of equipment and a software upgrade was begun for systems deployed in 2000. The next phase significantly enhanced the application in the financial arena and enabled its use in the large metropolitan courts by increasing its case processing capacity. In FY 2006, AZTEC began to be opened to allow e-citation and red light case initiation using an XML data stream, paving the way for electronic case filing while awaiting implementation of a next-generation case management system. Late in FY 2007, COT decided, and AJC concurred, to pursue implementation of a vendor CMS for general jurisdiction courts. Following successful implementation of that CMS in 13 superior courts, the rollout to apply this same CMS to serve limited jurisdiction courts using AZTEC was completed at the end of FY 20. Dialogue continues with the largest non-AZTEC courts to determine their current resource needs and possible timelines for adoption. Implementation of the finished system has standardized and significantly improved the efficiency of all ACAP limited jurisdiction courts in the state while enabling long-awaited enhancements to customer-facing services they provide.

The Criminal Justice Data Integration Project is also significantly reducing levels of court effort by eventually eliminating the redundant data entry now being performed. By 2004, the Judiciary had 64 Arizona general and limited jurisdiction courts operating on the ACAP software solution to pass criminal history data to DPS. Data integration was further strengthened as courts adopted the AJACS limited jurisdiction case management system statewide as well as with the rollout of the Arizona Disposition Reporting System and NICS reporting facility in conjunction with ACJC and DPS. The ADRS project proved the concept of using an enterprise service bus approach for statewide integration by connecting disparate information systems among justice partners. It provided the technological foundation for several projects that followed.

Appellamation is an appellate court case management system developed for the Supreme Court and both divisions of the Court of Appeals. This system uses a unique appellate information architecture dissimilar to the AZTEC database, but nearly as old as AZTEC. Though integrated with both AZTEC and the AJACS CMS to accept transfers of case information on appeal using the e-ROA program, replacement of Appellamation with AzACES, a vendor-supported product using current technology will be accomplished within the plan period.

The Juvenile Online Tracking System (JOLTSaz) provides for the automation needs of the juvenile justice community. The first statewide system implemented, the JOLTS statewide juvenile probation caseload management system developed in Maricopa County Superior Court in 1979 has now been fully replaced by a second-generation system in both Maricopa and the other counties. JOLTSaz users number approximately 2,600 statewide and include the following agencies: Juvenile Court Centers, Victim Rights Advocates, County Attorneys, Court Appointed Special Advocates (CASA), Public Defenders, Foster Care Review Board (FCRB), Attorney General's Office, Department of Economic Security, Clerk of the Court, ComCare, Court Administration, Department of Juvenile Corrections, and Adult Probation Departments.

The statewide Adult Probation Enterprise Tracking System (APETS) comprises a single database – almost 520,000 client records and nearly 40 million contact records. Though periodic enhancements to the software, support, and user training continue, more fundamental changes are necessary due to the age of the system and the need to support evidence-based practices (EBP). A major replacement effort is being undertaken within the plan period.

Fourteen of the fifteen superior courts use a common jury processing software package. Maricopa Superior Court, formerly operating on an internally developed system, migrated to an off-the-shelf system several years ago, based on their large volume needs as well as extended functionality requirements (like Web and IVR interfaces for the public). The judiciary undertook a study to determine the direction for jury processing software and functionality. That work group reviewed the migration path of the existing software in fourteen courts and determined to remain with that software rather than convert to the package selected by Maricopa. Recent upgrades to that system have enabled a more responsive and interactive interface to the public for jury processing via the Internet as directed by the Commission on Technology. Courts have now adopted enhanced features offered by the vendor that increase juror contact methods and streamline processing, including payment of jurors via debit cards.

Related centralized data repositories, processing and/or standards for second-generation systems include electronic document management systems; electronic filing; collections; automated notifications; legal research/legal portal; data sharing and integration processing; self-service center court forms; identity, authentication, and security; and global directories. The COT's ad hoc committee on centralized processing reviewed these issues during FY 2003 and provided recommended criteria to select the degree and type of centralization for many common court automation functions. These have either been put in place already or are being pursued within the plan period.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 5: SECOND-GENERATION STATEWIDE AUTOMATION ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS	
• Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure.	X
• Improve information access and communication from and to the judicial functions.	X
• Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.	X

BUSINESS VALUE

- Improved effectiveness of the Criminal Justice System through the electronic exchange of court data and documents and the provision of decision-making information to criminal justice administrators.
- Improved rural court productivity by providing the same level of technology afforded the large metropolitan courts.
- Improved consistency in record keeping and case management practices statewide.
- Improved customer service by providing higher quality of data and case management and greater public access to information.
- Improved responsiveness and productivity of court staff.
- Increased productivity of support staff.
- Reduced development costs by reducing the number of systems implemented and supported statewide.
- Reduced maintenance and enhancement costs by reducing the number of systems implemented and supported statewide.
- Reduced cost impact of legislative and judicial administrative changes to processes and procedures requiring changes to application software.
- Reduced training and support resources required by standardizing the applications software, systems software, and hardware deployed.
- Reduced cost of maintenance by routine enhancements, upgrades, and replacements as well as preventative maintenance.

DEPENDENCIES

- The maintenance and continued upgrading of the computing and communications infrastructure.
- Sufficient resources to enhance and maintain the limited jurisdiction and general jurisdiction case management system as e-filing is expanded to more case types over time.
- Continued codeset modifications to ensure both limited jurisdiction and general jurisdiction courts statewide effectively share the case / financial management system.
- Staff resources to perform statewide system development and implementations while still providing legacy support for case and probation management systems statewide. Sufficient resources at technology vendors to complete development and enhancements.

- The establishment of a cross-branch policy and governance structure for the development of the Criminal Justice Data Integration Project.
- Sufficient financial and staff resources to create and support new central repositories of electronic data and documents in support of statewide electronic case filing, bench automation, mental health case status, eAccess, eWarrant, and AZPOINT.

IMPACTS

With several major statewide systems all being replaced at nearly the same time and a desktop/laptop refresh cycle underway, the financial impact has been unprecedented. The problem was compounded over several years as the planned funding for the initiatives got interrupted by multiple reallocations of JCEF (a state-level automation funding source) by the legislature. During 2020, filing volumes shrank dramatically and with them available revenue. There is no longer any assurance that sufficient funds will exist to complete the statewide implementations of and requested enhancements to these vital, second-generation systems. The situation is so dire that no JCEF funds have been allocated to innovated projects for the first time in memory. In response to this challenging financial environment, Commission on Technology's funding subcommittee examined the scope and future needs for statewide automation then recommended a strategy for increasing revenue from several sources including a 2.5 percent per year increase in ACAP participation fees beginning in FY21, the first increase since FY05. Those additions have not proven sufficient to offset recent decreases in revenues.

Court business processes will be assisted by the workflow and document processing capabilities built into the new systems, resulting in much greater efficiencies in data entry and reporting. Integration points built into new automation systems will accept digital input from other systems and electronic filings, thereby precluding clerks from having to re-enter data from other sources. New systems also address costly technical debt, freeing up maintenance dollars and support resources.

Projects include:

- Case Management System (AJACS)
- Electronic Case Filing
- Public Access to Case Information and Documents
- Statewide eWarrants
- Statewide Orders of Protection and Repository



Improve Data Exchange, Communications, and Public Access

BACKGROUND

The Judiciary provides electronic access to court information via the Internet and uses messaging middleware in order to serve the public better, contribute to the improved effectiveness of the criminal justice system, and make courts more accessible. Information includes general information, case information, and court calendars. Additionally, we continue to foster development of electronic data interchanges between criminal justice agencies and work toward electronic filing in all courts and all case types for both the legal community and self-represented litigants.

During Fiscal Year 2002, the Judiciary launched its Public Access Case Look-Up Website. Using the service, the public can access case information with a 24-hour currency by case number or party name. This offering was an immediate and enormous success; in only the first five months of operation (February through June 2002), the site had over 12 million queries. Last year, it had almost 47 million queries by almost 2.0 million visitors.

The Judicial Branch recognizes and supports the need for improved operational effectiveness of the criminal justice system as a whole. Each criminal justice function must improve not only within itself but also in concert with the other criminal justice agencies. Given that a single court organization exists in the state versus multiple other agencies involved in law enforcement, the Branch is in a unique position to bring together the other functions to improve the manner in which justice is administered in the State of Arizona. The courts, being central to the system, are eager to collaborate in the statewide effort that began in Coconino County in Fiscal Year 2000 to automate the exchange of data used by more than one criminal justice agency. The original project linking the AZTEC CMS application for the Superior Court in Coconino County and the Coconino County Attorney Case Management System was improved upon over time and expanded into the Integration System Model, which was made available to the remaining Arizona counties. AZTEC's ability to collect integration-related data has been greatly expanded in AJACS which easily accepts XML data streams. Integration functions using XML interfaces are being performed by all second-generation CMSs.

A 2002 project developed an electronic process for protective orders and created two systems: Court Protective Order Repository (CPOR) and Law Enforcement Protective Order Repository (LPOR). LPOR interacts with both the ACJIS network and NCIC, enabling law enforcement to query protection orders, review the data, and send it to the NCIC system. But only 4 counties made full use of the repository at the time. Work has been done to re-architect the system to ensure participation from all 15 Arizona counties' courts and law enforcement agencies to provide for better public safety. A 2002 project provided law enforcement and the public with access to a repository of domestic violence information. Following recent legislation designating the court as the holder of record, the process of gathering and communicating that information has been fully digitized with a secure portal that enables victims to enter petitions from locations outside courthouses. Functionality delivered through the AZPOINT application has been vital to connecting domestic violence victims to justice during the COVID-19 pandemic health crisis.

Another data sharing project is electronic disposition reporting. This project provides for electronically sending criminal case dispositions to the Department of Public Safety via a messaging system. Since 2004, 67 courts have been able to electronically report dispositions to the state's criminal history repository. In concert with ACJC and DPS, AOC has now taken the next incremental step in creating an electronic workflow among justice partners using enterprise service bus (ESB) architecture for exchanging criminal information prior to its inclusion in the DPS criminal data repository. The enterprise service bus acts as a clearinghouse for information independent from the systems that provide or consume its data. This

approach is increasing the ultimate acceptance rate for data at DPS to above 90 percent and ensuring that justice partners are processing the correct charges for the correct suspect.

AOC continues traversing an ESB strategic roadmap that winds through standards, policies, processes, and procedures to foster data exchange among justice partners and to direct future access to Arizona justice data. As part of that strategy, a Central Case Repository (CCR) continues being populated. CCR is composed of an operational data store (ODS) designed to integrate data from multiple disparate sources and a set of managed services used to interact with this data in a secure, standardized way. No direct access is provided to CCR data; rather, access is provided to the set of managed services employing standardized security and a communication structure based on the NIEM, LegalXML, and Electronic Court Filing (ECF) standards. As the demand for court data grows, these court technology standards will prove to be a valuable tool for facilitating data interchange between the multiple agencies, environments, and devices adopting them.

CCR is being populated with the current information about court case data from the various court systems of record (CMSs) operating in Arizona, thereby enabling a central point of access to case information for enterprise applications that require it from multiple Arizona courts or CMSs in the state. CCR will also contain a reporting environment composed of multiple data marts that are being created on an as-needed basis to serve the internal business needs of individual courts and the AOC. AJACS, Maricopa Superior Court's iCIS and Pima Superior Court's Agave CMSs are in the process of providing the following standardized, case-related data elements: Court, Case, Participant(s), Event, Financial, Hearing, Judgment, Charge, and Sentence. The AZPOINT Project called sharp attention to the absence of data/code standardization across the state's various CMSs, a situation being addressed by a new data standardization workgroup reporting to the Supreme Court Data Standardization Committee chaired by Justice Beene.

Following proof of the technical concept behind automating initiation, recall, and execution of warrants at critical junctures in the justice system (e.g., when a person is arrested, booked, scheduled to appear in court, admitted to the jail or prison, or appears at scheduled probation meetings), the software licensing model was deemed too expensive for statewide adoption. Work switched to a new approach for a single, statewide arrest warrant repository that enables all criminal justice stakeholders to access all warrant types in a variety of formats with customizable views likely to be more financially feasible. That concept has been proven in Glendale Municipal Court, the pilot, and continues expanding statewide via AJACS CMS enhancements using federal grant funding to offset vendor costs to law enforcement associated with the expansion.

Given the A.R.S. §13-607 requirement that a defendant's fingerprint be captured on the sentencing order and the current limitations of "ink and roll" processing, Arizona Criminal Justice Commission (ACJC) recommended that Superior Court locations in Arizona implement mobile fingerprinting technology in the courtroom. The mobile device creates a high-resolution image of the defendant's fingerprint enabling immediate feedback on its quality, ensuring that the fingerprint on the sentencing order will always be usable by prosecutors for future charging purposes, in accordance with the statute. Once fingerprinted, a defendant is assigned an AFIS Record Number (ARN) used to tie the subject stopped by police with the defendant that appears in the courtroom and finally to the inmate that appears for intake at the Arizona Department of Corrections (ADC). Future phases of the project will undertake integration between AFIS and the court CMS.

The Judicial Branch also recognizes that the public will be better served by improving operational effectiveness with outside non-judicial entities. Technology can enable this objective. For example, with the implementation of expedited family court processes, the expanded use of electronic data exchange will support speedier and more accurate processing of these cases by facilitating communication among the various state, local, and judicial entities involved.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 6: IMPROVE PUBLIC AND AGENCY ACCESS ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS

- Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure.

**STRATEGIC INITIATIVE 6:
IMPROVE PUBLIC AND AGENCY ACCESS
ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS**

- | | |
|--|----------|
| <ul style="list-style-type: none"> • Improve information access and communication from and to the judicial functions. | X |
| <ul style="list-style-type: none"> • Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads. | X |

BUSINESS VALUE

- Improved effectiveness of the criminal justice system through the electronic exchange of court data and documents and the provision of decision-making information to criminal justice administrators.
- Improved consistency in record keeping and case management practices statewide.
- Improved customer service by providing higher quality of data and case management and greater public access to case-related information.
- Improved protection for domestic violence victims through complete automation of the protective order process.
- Improved public safety through improved centralized access to validated and standardized information, such as criminal history, orders of protection, domestic violence records, etc., for law enforcement.
- Improved quality and quantity of data available to the AOC for analysis and research.
- Improved electronic integration with the legal community and other justice-related departments and agencies.
- Improved quality of service to the public by providing other government agencies, such as DES, DCS, and DOR, with more accessible electronic information to improve and support their processes.
- Increased overall accuracy and timeliness, reduction of processing backlogs, and database completeness.
- Increased transparency and public access to the Supreme Court’s rulemaking process and oral arguments.

DEPENDENCIES

- The Enterprise Service Bus for all data exchange applications.
- Continued development and support of a technical architecture enabling statewide data integration.
- Acquisition of resources to continue developing pilot data sharing projects designed to make use of the integration infrastructure architecture.
- Upgrade / replacement of the judicial data warehouse, JUSTIS, with the central case repository (CCR). Expansion of the repository from an e-filing-specific facility to a true, multi-application case index.
- Cooperation of state and local agencies, especially law enforcement, as well as federated courts using independent CMSs.
- With state and local agencies, development of mutually agreed-upon security policies and procedures.
- Coordinated change management to assure that interdependent infrastructures continue to function together.
- Replacement of any remaining “ink and roll” fingerprinting with LiveScan throughout the state.
- Installation of videoconference equipment in courtrooms of rural superior courts.
- Sufficient network bandwidth to carry increased video and data integration traffic.

- Continued capabilities of the Supreme Court’s video streaming outsource partner and network to carry live video.

IMPACTS

With the Judiciary now focusing on “front office” functionality, public and agency access becomes a primary concern for every project. Development projects will need to incorporate information and functionality to address this initiative. For instance, the domestic violence repository required that CMSs add certain information not collected at the time in order to fulfill the electronic reporting requirements as well as provide sufficient information to law enforcement. Videoconferencing initiatives will need to focus on improving access to courts, in most cases by providing for hearings and arraignments and other court processes without the need to be physically present in the courtroom. Even infrastructure maintenance, which is generally perceived to be internal, will need to build capacity to serve the information distribution needs of this initiative as more data/video traverses the network over time.

Projects include:

- 2FID Implementation
- Electronic Document Management Systems
- Electronic Case Filing
- Public Access to Case Information and Documents
- Statewide eWarrants
- Statewide Protective Orders and Repository



Digitize the Court Environment

BACKGROUND

Courts are following industry's lead to "digitize everything," placing a focus on information systems to make it easier for people to get their jobs done and done well. When caseloads grow, so does related data entry, and, unfortunately, the harsh reality is that clerical positions are not added at a rate anywhere near any caseload growth rate. The solution is to increase the productivity of existing workers through technology, taking a holistic approach to arrive at a standards-based, integrated system comprised of various disparate parts. This path can invite creative destruction, however, wherein the old way of doing something declines then disappears, resources are re-deployed, institutions and people adapt, the new way grows, and overall benefits are recognized. The problem with creative destruction is its pain for anyone involved in the old technologies and old ways of working. Though courts will take an evolutionary rather than revolutionary approach, in the midst of digitization lie some changes in the way courts conduct business, both from the bench and in the back office.

Fundamental to increasing productivity is a mindset that views the court system as an information supply chain — a network of courts at all levels collectively responsible for dispensing justice within the state. Its goal is to deliver the right information to the right place at the right time. Because data created at or for lower courts may eventually end up at the Supreme Court on appeal, a chain relationship exists between law enforcement, municipal or justice courts, the superior courts, the courts of appeal, and the Supreme Court. This supply chain considers all the individual links leading up to the final one as essential functions within the overall value equation.

As mentioned in "Second-Generation Automation Systems," legacy case management systems necessitate keying and re-keying case information. Second-generation systems pick up information directly from law enforcement and attorneys' systems, reducing workload by moving the responsibility for input to the source, removing the clerk from the tedious data entry and validation business. The AJACS CMS forms the foundation of the "Digitize Everything" approach, on which are layered imaging, EDMS, backup/data recovery, court-to-court case transfer, electronic access to records, electronic case filing, central repositories of electronic documents, electronic notifications, electronic archiving, and judge/bench automation activities. In addition, courts are beginning to grasp the magnitude of digital evidence headed their way (18 percent compound annual growth of surveillance video footage in addition to rapid adoption of law enforcement body cameras) following recommendations of the chief justice's Digital Evidence Task Force issued in late 2017.

All courts face paper records management and case file storage challenges today. The Judiciary continues to implement technologies such as imaging and electronic filing to address document management requirements. Electronic filing also supports courts' migration to more streamlined processes and workflow management, which imaging was originally begun to facilitate. This initiative has been a high priority each year since the first IT strategic planning session in 1990, as courts have scanned paper filings they receive as a prerequisite to getting rid of paper altogether. But pure imaging provides no metadata, making storage easy but retrieval very difficult. Strategic projects relying on electronic document management continue to be among the Commission on Technology's priorities. These projects rely not only on imaging but also on metadata and case management system integration for efficiently storing and retrieving true electronic documents. All superior court clerks have now implemented a full-featured EDMS and the largest limited jurisdiction courts have already followed suit. Smaller LJ courts received centralized EDMS services with the implementation of AJACS.

A June 2000 EDMS study recommended centralized document repositories for jurisdictions lacking technical resources, but legislation interpreted as requiring the storage of superior court records within each county blocked the approach. That initial EDMS approach was revised to a federated model and efforts were directed at selecting a standard application for superior courts to reduce the number of system interfaces that would be built and maintained. Today, most limited jurisdiction courts and some rural superior courts lack the technical resources required to operate a robust EDMS over the long term, safeguarding all original electronic records for significant retention periods, and providing timely disaster recovery. A review of issues affecting timely access as judges and courts depend increasingly on paperless e-records led to revisiting the federated approach. As a result, the AOC enhanced the centralized LJ EDMS to also serve 11 GJ courts that have now consolidated their documents into the managed system.

As electronic records exist within lower courts they can be re-used for appeals in higher courts. Technical specifications for data and document transfer have been defined to seamlessly move case information and related documents from limited jurisdiction to general jurisdiction courts and then on to appellate courts within the state – the supply chain of justice. Use of a central document repository will alternatively provide judicial officers a point of access to relevant case documents without requiring additional steps to transfer data and the overhead of re-saving them on the receiving court’s EDMS and backup systems.

Public information from the set of digital case information is being collected in a central repository as the intended source for public inquiry. Public users will be able to “subscribe” to selected cases and receive updates based on changes to specific case information. Pro per se filers are increasingly using interactive, intelligent forms that output a stream of digital data. An e-filing portal provides standard court forms online and leads users through the process of filling out forms and printing them or even e-filing certain ones. PCs deployed at many court, county, and municipal sites across Arizona make public access to electronic resources increasingly available to court users.

The vast majority of case-related documents begin life on a computer, either in law firms, at parties’ homes, or on court websites. With a growing number of EDMS file rooms in existence and second-generation CMSs online, electronic case filing enables courts to efficiently consume this digital source data directly. The courts’ enterprise service bus provides a logical location for storing and forwarding electronic filings through a single “front door” to the court system. Law enforcement will continue to expand use of handheld citation devices, photo radar, and red light cameras which output validated digital data. Mass filings, like metropolitan eviction actions originating within the same law office, are also slated for e-filing. Once these projects are fully implemented, the tipping point will be reached – digital data will be the norm while paper is the exception. No plan exists to totally discontinue paper filing at the court counter, but the practice should become obscure over time as the breadth and convenience of electronic filing increases.

Solving the electronic identity riddle as part of e-filing will allow courts to provide trustworthy case-related notifications of warrants, orders, or judgments, further reducing the production of paper within the court but also increasing reliance on electronic systems and processes. Procedural solutions within the Judiciary like “/s/ typed name” or a simple technical solution, like active directory authentication, may relegate need for a costly and complex technical signature solution to only those items originating or transmitted outside the courts. AOC continues investigating products for “signing” documents originating in courts for use by others in a manner that could be checked for validity against a log maintained by or on behalf of the issuing court.

Following publication of a report issuing a call to action for digital evidence policies and practices by the National Center for State Courts and the subsequent recommendations of the Supreme Court’s Digital Evidence Task Force, the judiciary has contracted with a vendor for management of digital evidence at all levels of courts statewide. Work is underway on pilot projects with several courts of various levels and sizes.

Finally, an electronic archiving and destruction strategy must be addressed for records that were only ever digital (“born digital”). AJC has adopted the recommendations of the Electronic Records Retention and Destruction (ERR&D) Committee that all electronic records be automatically destroyed at the very end of their approved retention periods, unless designated as having historical value. With that direction in mind, published retention periods have been re-examined for all levels of court. Arizona State Library Archives and Public Records (ASLAPR) is the eventual owner of permanent or extremely long retention records under the retention schedules and continues to be a partner in crafting the statewide solution that takes into account the end-state of electronic court records. ASLAPR continues to require records to be transmitted on paper or microfilm, regardless of their storage medium at the court, though a recent statute establishing a fund to finance an

electronic archiving facility provides a positive step toward changing the paradigm. Following an unsuccessful pilot effort several years ago, work is getting underway on a revised approach to transfer permanent-retention court records to ASLAPR.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 7: DIGITIZE THE ENVIRONMENT ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS	
<ul style="list-style-type: none">• Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure.	
<ul style="list-style-type: none">• Improve information access and communication from and to the judicial functions.	X
<ul style="list-style-type: none">• Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.	X

BUSINESS VALUE

IMAGING/EDMS

- Reduce cost of records storage.
- Provide simultaneous access to the same document.
- Lay foundation for electronic case filing.
- Drastically reduce record on appeal transfer time.

BACKUP/DATA RECOVERY

- Reduce the risk of losing court assets.
- Reduce time to restore business information following a disaster.

COURT-TO-COURT CASE TRANSFER

- Eliminate re-keying of case information.
- Improve electronic integration with the legal community and other justice-related departments and agencies.

ELECTRONIC ACCESS TO RECORDS

- Improve access by the public to court records.
- Improve access by justice partners to court records.

ELECTRONIC CASE FILING

- Extend filing hours and increase access to justice.
- Reduce paper costs.

ELECTRONIC NOTIFICATIONS

- Simplify court communications processes.
- Reduce paper costs.

DIGITAL EVIDENCE

- Improve electronic integration with the legal community and other justice-related departments and agencies.
- Simplify court communications processes.
- Preserve needed case-related documents and data.
- Reduce the risk of losing court assets.

ELECTRONIC ARCHIVING AND DESTRUCTION

- Improve the accessibility of archived court information following approved retention schedules, especially at the superior court.
- Preserve needed electronic case-related documents and data.
- Remove electronic case-related documents and data once no longer needed.

DEPENDENCIES

- Transferring increasing numbers of imaged and electronic documents as well as digital evidence files may require upgraded network capability.
- ACAP desktop PCs need to be able to function as scan stations in courts for the central EDMS model to work.
- Funding for maintaining all hardware and software required to operate the federated EDMS model, both at AOC and the local courts.
- Authorization, verification, and signature technologies and policies must be established for certain situations.
- Systemic thinking needs to be applied to this entire process, as business process reengineering and standardization are absolute requirements when creative destruction is involved.
- Public, commercial, and government agency needs for court documents online must be balanced against privacy interests. Stakeholders must be comfortable with policies and practices for data/document security classification and resulting levels of access.
- Periodic media and format updates are required to ensure continued accessibility of lengthy- or permanent-retention files. Automated destruction requires further case management systems development and effective training of court clerks.
- Detailed technical requirements and safe business practices must be clearly defined and adhered to before paper is removed from the court environment.

IMPACTS

Simply put, digitizing the courts provides the foundation for e-government. It enables "born digital" content from litigants' systems to be filed into court (including evidence) and judgments/minute entries to be rapidly communicated from court to affected parties (getting clerks out of the labor-intensive minute distribution business).

Digitization also makes a tremendous dent in the courts' paper records storage challenges since disk space is far cheaper than shelf space and has a far smaller footprint. It enables increased justice partner and public access to information (within the bounds of privacy) since multiple individuals can view the same electronic case file at the same time. And, through

metadata and full-text searchability, it provides for almost instant location of the needed portion of a particular record without reading page after page of a paper file.

Behind the counter, digitization streamlines caseflow by enabling an electronic workflow in which records are intelligently routed to the next functional area and workers see a queue of records that await their action. This keeps the focus on value-added work, allowing more cases to be processed with the same resource level.

But all this doesn't come without the stress of a paradigm change — the current workforce is paper-centric and current rules, work processes, and access controls were all developed in a paper world. Processes and related court policies have to be reconstructed around working "digitally" over time. As industry has proven over the past two decades, the rewards of digitization far outweigh the risks.

Specific projects include:

- Electronic Document Management
- Public Access to Case Information and Documents
- Business Continuity
- Electronic Filing
- Judge/Bench Automation
- Statewide eWarrants
- Statewide Protective Orders



Provide Divisions of the Administrative Office of the Courts Solutions for Internal Administrative Support

BACKGROUND

In addition to supporting statewide technology projects, the Information Technology Division of the Administrative Office of the Courts is responsible for development and support of a variety of automated systems for AOC divisions. These divisions are supporting courts in the pursuit of the goals outlined in *Justice for the Future: Planning for Excellence 2019-2024*.

The Administrative Office of the Courts' mission is to assist the chief justice in carrying out the constitutionally prescribed responsibility for providing administrative supervision over the integrated Arizona court system and to support the chief justice and the Supreme Court in providing quality administrative leadership and assistance to Arizona's courts.

Further, legislation has often charged the Supreme Court with administering certain programs in support of justice-related activities, for instance, Foster Care Review Board (FCRB) functions, certification of private fiduciaries and process servers, the confidential intermediary program, defensive driving school certification, legal document preparer certification, court reporter certification, and grant tracking. These activities often require automation in order to perform the data collection and tracking needed. Several programs of this nature are supported and/or in development.

STRATEGIC ALIGNMENT

STRATEGIC INITIATIVE 8: AOC AUTOMATION ALIGNMENT WITH COMMISSION ON TECHNOLOGY STATEWIDE AUTOMATION GOALS	
• Provide a stable, reliable, functionally rich, extensible, interoperable base of business automation and infrastructure.	X
• Improve information access and communication from and to the judicial functions.	X
• Investigate and invest in technology solutions that improve judicial efficiency and effectiveness in handling growing caseloads.	X

BUSINESS VALUE

CERTIFICATION AND LICENSING DEPARTMENT (CLD) ONLINE RENEWAL PROJECT

- Performed migration tasks related to MST (Salesforce) development and implementation of online renewal application and Certification Management System for licensed document preparers, fiduciaries, court reporters, and defensive driving schools/instructors.

AS/400 END OF LIFE PROJECT APPLICATION REWRITES

- Re-engineered the Reconciliation Report application used as an interface between AOC's New World system and ADOA's AFIS financial system onto a SQL Server and .net platform.
- Continued re-engineering WETR online employee timekeeping system onto a SQL Server and .net platform utilizing Azure AD and mobile compatibility to eliminate need for VPN access by remote workers.

FINANCE PROJECTS

(The Administrative Office of the Courts maintains budget, accounting, and personnel records for the AOC and the Supreme Court.)

- Performed annual maintenance tasks and maintained ad hoc reports for New World financial management system.

AZTEC ERR&D

- Completed additional year's ERR&D data purge from data warehouse for AZTEC courts.

JDTS POWER BI DASHBOARD

(The Administrative Office of the Courts maintains the interface for a Time Standards Reports Dashboard for AJACS and non AJACS courts.)

- Built and implemented the dashboard interface for all AJACS GJ courts.
- Built and implemented the dashboard interface for Maricopa and Pima Superior Courts.

AOC FARE INTERFACE

- Assisted Mesa and Gilbert Municipal Courts with testing and implementing the FARE interface.

PROJECT MANAGEMENT OFFICE (PMO)

- Migrated from Project Server 2013 on premises to Project Server On-Line in the cloud;
- Provided management-level project milestone reports;
- Facilitated project reviews of strategic projects;
- Provided counsel on common project methodology model, based on project size;
- Provided leadership and direction for consultant contract management and handled the most complex contracts;
- Provided guidance and scheduling of technical testing in support of ITD staffing needs;
- Provided mentoring/advising on issues related to project risk, issues resolution, and conflict management;
- Facilitated project requests and scope approvals by the ITD core management team;
- Maintained a master status list of all enterprise projects and provided reports to senior leadership;
- Created a SharePoint site providing status for all ITD priority projects;

- Directly managed various projects for which other project managers were not available; and
- Coordinated external agency or vendor-related project needs.